

MEMORANDUM

To: ASTM Task Group: AUL/IC Tracking System

From: Mike Sowinski, DPRA Inc.

Date: September 19, 2003

Re: AUL/IC Tracking System Minimum Elements

I. Introduction

During the AUL/IC Tracking System Task Group's recent meeting, the group agreed that "the ASTM guide would describe minimal elements that should be tracked by users, regardless of which system (federal, state, local, or private) they are currently using or developing." The group also agreed that ASTM would "simply describe[e] minimal elements that most users would want to track," rather than seek to define the perfect system.

The group also agreed that group members would provide their thoughts concerning:

- (1) The universe of users of an IC tracking network/system
- (2) The minimal elements that he/she feels should be tracked by an IC tracking network, and
- (3) The purpose of an IC tracking network/system from his/her perspective.

With that in mind, the analysis below seeks to identify the universe of IC System users, their relative interests and, in turn, the minimal elements that most IC System users would want to track.

I know that the terminology on this subject often gets convoluted, so to be clear I use the phrase Institutional Control (IC) to mean the legal or administrative instrument, such as an environmental covenant or a government ordinance or an environmental agency administrative order or agreement, and the term Activity and Use Limitation (AUL) to mean the actual land or activity restrictions contained within the provisions of an IC.

II. Analysis

Section A outlines the universe of IC System users, and provides my thoughts pertaining to their relative interests in using IC information. Section B, then, summarizes the minimal elements, given the relative interests of prospective IC users. Finally, Section C provides my perspective concerning the purpose of an IC Tracking Network/System (hereafter IC System).

A. The Universe of Users for an IC Tracking Network/System

Six categories of IC Tracking Network/System users exist.

1. Government Agency Environmental Regulators. This group captures Federal, State, and some Local Government Environmental Agencies¹ – actually the divisions within such agencies – who authorize site cleanups which allow residual contamination to remain in place, or who otherwise hold the responsibility to make sure that ICs operate effectively. These users, in my view, at a minimum would ask an IC Tracking System to reliably convey whether ICs exist at post-cleanup residual contamination sites, and whether such ICs continue to prevent exposure risks in the way relied upon by the cleanup decision.

Thus, at a minimum, I think such users would generally ask an IC System to identify the site's within their jurisdiction where residual contamination remains in place, to provide a reliable record that an implemented IC actually exists, to allow them to know that the IC protects persons from the exposure risks posed by the site's residual contamination, that IC violations have not occurred, and that the IC protects any engineering controls. And, these users would probably also like the system to point them towards a means to follow-up if IC issues exist – such as a site ID that allows them to use other data systems for further information.

While these elements may comprise the minimum needs of environmental regulators, some regulators will understandably want more from an IC System. Many regulators will desire information pertaining to IC monitoring and IC enforcement. Like I discuss below, I refer to this type of information as IC stewardship information. The desire for IC stewardship information occurs, at least in part I think, because the actual human institution to monitor and ensure the effectiveness of IC use remains immature and not trustworthy. Thus, some regulators, keeping in line with their responsibility to ensure the long term protectiveness of the remedies they authorize, seek monitoring and enforcement information from an IC System so they can feel assured, from the IC System itself, that ICs are working as intended.

Thus, when considering whether minimum IC System elements should include IC stewardship information, it seems to me that a crucial inquiry must compare the need to bolster the monitoring and enforcement-related IC System functionality versus the need to improve the human process of monitoring and enforcing ICs. It seems that a more trustworthy human process would demand less onerous information management, and visa-versa. This IC System–human process relation raises the important question of whether government agencies should invest in the human institution or information management systems - or both. And, how to leverage both investments synergistically.

2. Responsible Parties. Though this will vary among responsible parties, I think that, like environmental regulators, responsible parties want ICs to remain effective and,

¹ Some state laws, such as California's SB32, empower local government environmental agencies, to authorize and oversee cleanups.

in turn, protect persons from exposure to residual contamination. Effective ICs, after all, will reduce RP future liability – whether imposed by No Further Action “reopeners,” CERCLA liability, tort liability, or whatever.

Thus, I think responsible parties would ask an IC Tracking System to help prevent IC violations. In order to do this, some RPs may ask an IC System to “alert” them of land uses or activities that may conflict with their property’s IC restrictions – so that they can then decide how to act in order prevent such conflicts. Other RPs may ask an IC System to provide clear and readily accessible depictions of IC boundaries and associated AULs to land users who, without such knowledge, may unwittingly violate an IC.

What both groups of RPs have in common, I think, is that they would ask an IC Tracking System to depict clear geo-spatial boundary information of areas impacted by ICs, and a summary description of the type of activities prohibited within such boundaries. I’m not sure whether, in addition to depicting the IC boundary and associated AULs, RPs would also want an IC Tracking System to publically depict the site’s residual contamination that triggered the IC – I think many RPs would rather only convey the property restriction.

3. Land Transaction Community. This group encompasses many parties, including all those we typically think of being involved with real estate transactions – buyers, sellers, Phase I providers, lenders, developers, to name a few. During real estate transactions, this group would probably want an IC System to provide accurate information concerning any encumbrances on the title, including environmental ICs. Accurate information about title encumbrances would, of course, inform many of the decisions of this group – especially buying and lending decisions. I focus on title-related restrictions, because I think that the land transaction processes can learn of government ordinances as part of their routine process. However, identifying IC-type of title encumbrances has seemed to prove more problematic.

Thus, these users will ask an IC System whether encumbrances on title (i.e. ICs) exist, which AUL restrictions they impose, whether these are permanent restrictions, and whether restrictions can be modified or terminated. And, they will also desire an IC System to provide a common element between it, and the land recording industry. Thus, they would likely desire an IC System to identify Parcel ID numbers and legal descriptions for the property restricted by ICs.

Concerning the modification and/or termination of ICs, more so than other users and especially when ICs get in the way of development plans, these users will tend to seek ways to modify or terminate the IC. Thus, they will want to look at the residual contamination that triggered the IC in order to devise schemes to remove the IC-related encumbrances from the title. These same users will also want to know about the nature and extent of environmental contamination for the same reasons they do now – environmental liability.

Such residual contamination is important information, of course. And like my table below describes, I identify it as minimally required because I think most users will want to know this. But, I think its worth pointing out that an existing process exists to learn about residual contamination - namely, the Phase I and Phase II process. Thus, an IC System could exclude information about residual contamination and rely on the Phase I and Phase II process for that. While I think this might work for the Phase I-accustomed land transaction community, given the interest of the remaining users, I think an IC System should include residual contamination information.

4. *Government Land Use Permitting and Land Use Planning Agencies.* This group includes local land use permitting agencies, well permitting departments, building permit departments, and similar agencies. These users would ask an IC System to clearly show the geo-spatial boundaries of ICs and their associated AULs, so that their permit granting decision process can account for this. Land use planning agencies would likely also ask an IC System to provide a planning-region perspective of IC existence – both current and future – so that they can make informed regional-scale land use planning decisions.

5. *Excavators.* This group needs to know whether ICs prohibit their proposed excavations, or whether ICs impose conditions precedent to performing any given proposed excavation. Thus, this group would probably ask an IC System to provide it with a clear and readily consumable answer to the above issues, during the time when they would normally learn about other underground hazards – during the “One Call” process. Put another way, this group would probably want an IC System to coordinate with the local “One Call” center so that when the excavator calls to learn about underground hazards, a locator comes to the excavation site and, in addition to utility lines, marks the area where ICs either prohibit or condition excavation. And, where conditioned, the excavator would probably ask the IC System to provide clear instructions on how to proceed. In turn, the IC System would need to have clear geo-spatial depictions of IC boundaries and any AULs that either prohibit or condition excavation.

6. *Affected Public and Environmental Groups.* This group includes neighboring landowners who feel concerned by their proximity to residual contamination, and environmental groups who desire to know that ICs effectively protect persons from residual contamination exposure. This group, in my view, may demand the most information than any user.

B. Suggested Minimal Elements

While IC System user interests shed some light on Minimum IC System requirements, to put my suggested minimal elements in context, I divided IC information into three categories as described immediately below. While all three categories of information will become generated from an “institution” to track and steward ICs, I think

one category – the Raw IC Information category – captures the minimal elements of an IC system.

1. *Raw IC Information.* Raw IC Information refers to the information necessary to allow a person to know the IC instrument at use, the AULs imposed by the IC, and the AUL boundaries. In other words, it allows one to know which land uses and activities the IC prohibits, and where the boundaries of those prohibitions exist. When pushed to identify minimum IC System elements, I think most people will gravitate towards such Raw IC Information. Indeed, my “Minimum IC System Element” table below primarily covers Raw IC information.

2. *IC Conflict Monitoring Information.* Where Raw IC Information exists, monitoring prospective land activities or uses against the IC restrictions can occur. For example, land sale monitoring, excavation monitoring, land use permit monitoring can compare these prospective uses against IC AULs. In turn, an enormous amount of IC Conflict Monitoring Information will become generated during IC Conflict Monitoring – potentially conflicting land uses may even occur daily in some cases. This is important information, but it seems to qualify as the type of information to be handled by IC Conflict Monitoring groups, rather than information to include within an IC System. Thus, when pushed to identify minimum IC System elements, I do not think that this type of information will qualify.

3. *IC Stewardship Information.* IC Stewardship Information refers to information which shows that an IC remains operating effectively. For example, it includes IC monitoring information (i.e., who possesses monitoring obligation, IC-required monitoring frequency, and monitoring results), and IC enforcement information (i.e., who possesses the authority to enforce the IC, IC violation penalty occurrences, and IC violation penalties). Thus, a potentially enormous amount of IC stewardship information will probably become generated as IC stewardship occurs. The environmental regulators who authorize IC-reliant cleanups, in my view, will primarily desire this type of information – though some environmental groups and responsible parties may also. This is extremely important information for the purposes of providing a record that implemented ICs utilize a trustworthy monitoring and enforcement scheme. Indeed, in my view, environmental regulators should ensure trustworthy monitoring and enforcement of the ICs they authorize. Without IC stewardship information within and IC System, many environmental regulators would probably ask “how do you know that the IC is working.” Other users would probably feel that if the Raw IC Information is readily accessible to users, then that’s enough to ensure that it’s working.

Even when pushed to decide whether IC stewardship information qualifies as minimally applicable information for a varied user group, I can’t come down on one side of this. This is a hard one.

Minimum IC System Elements

	<i>Environmental Regulators</i>	<i>RPs</i>	<i>Land Transaction Community</i>	<i>Land Permitting and Planning</i>	<i>Excavators</i>	<i>Affected Public and Enviro</i>
Site ID Information	X	X	X	X	X	X
Cleanup Program Which Authorized IC-Reliant Cleanup	X	X				X
Exposures Against Which the Cleanup Expected the IC to Protect	X		X	X		X
Geo-spatial Boundaries of Residual Contamination	X	Yes, but not public accessible	X	X	X	X
Contamination Description	X		X	X	X	X
IC Implemented (Y/N)	X	X				X
IC Contact Info.	X	X	X	X	X	X
Type of IC	X	X				X
Geo-spatial Boundaries of ICs	X	X	X	X		X
Parcel ID Numbers for IC-impacted Property	X		X	X		X
Legal Description for IC-impacted Property			X			
Electronic Access to Actual IC	X		X			X
Geo-spatial Boundaries of AULs Imposed by ICs	X	X	X	X	X	X
Precise Narrative Summary of Each AUL	X	X	X	X	X	X
Estimated Duration of AUL	X	X	X	X		X
Whether IC AULs Protect Against Exposure to Residual Contamination	This is a fundamental question that many user groups will want to know – especially regulators. The land transaction community will also want to know the relation between residual contamination and IC AULs, especially if AULs block redevelopment plans. But, this question requires analysis and judgment. I think that an IC System should operate as a tool to allow an informed answer to this question, but that the IC System should not seek to directly answer this.					
Geo-Spatial Boundaries of Non-Enforceable Notice Provided by IC.	X		X	X	X	X
Precise Narrative Summarizing IC Notice.	X		X	X	X	X
Tailored Excavation Instructions (i.e. Soil Management, Personal Protective					X	

	<i>Environmental Regulators</i>	<i>RPs</i>	<i>Land Transaction Community</i>	<i>Land Permitting and Planning</i>	<i>Excavators</i>	<i>Affected Public and Enviro</i>
Equipment)						
IC Stewardship Information	X	As discussed above, this potentially enormous amount of IC monitoring and IC enforcement-related information provides crucial information related to the issue of whether the IC can and actually is working effectively. Varying users will disagree on whether to include it in as a minimal element of an IC System.				

C. The Purpose of An IC Tracking Network/System

To address this warrants a brief discussion of the larger context – the presupposed “institution” upon which institutional controls supposedly rely. I don’t think an institution really exists yet, though many of its elements do.

Concerning existing IC institution elements, for example, zoning ordinances, local government permit requirements, and property recording acts have served to either directly restrict or at least provide notice about land use restrictions. These institutions, however, do not dependably ensure IC effectiveness – probably because ICs present a more grave and constant risk than the land restrictions typically contemplated by these programs. In addition, Federal, State, and Local environmental enforcement programs work to ensure compliance and deter violations of environmental rules – but, at least to date, they have probably not focused enough attention on IC stewardship matters. A successful IC “institution” will probably require existing land use and environmental programs to more directly contemplate ICs.

An IC System can work as a crucial tool to make this happen. Thus, I think an IC System should work as a tool to improve forthcoming environmental enforcement improvements geared towards ICs. I also think an IC System should provide a central point for access to minimal IC information, in a way that compliments information currently available within the existing institutions to control land uses and enforce environmental laws.